### MANDATORY QUALITY ASSURANCE PROVISIONS

P/N: (06710) 4055T40P01, Rev K

NOMEN: HIGH PRESSURE TURBINE ROTOR SYS

NSN: 5307-01-144-3972

Criticality: CSI

Criticality determination date: 23 Jun 04

#### APPLICABLE CLAUSES:

Articles to be furnished hereunder shall be manufactured, tested and inspected in accordance with drawing number General Electric Drawing (99207) 4055T40 and all details and specifications referenced therein.

I. Process/Operation Sheets Revision date shall be utilized in manufacture of the articles to be furnished hereunder.

### II. Quality/Inspection Requirements

- A. MIL-I-45208 applies or ISO 9000 equivalent.
- B. First Article testing applies. (Government Testing)
- C. Production Lot Testing applies. (Government Testing)
- D. Mandatory Inspection applies.

### III. Supplemental Requirements

- A. Additionally, paragraphs 3.1-3.5, 5.1-5.2, and 6.1-6.2 of MIL-Q-9858 apply.
- B. The contractor shall identify on the process/operation sheets all manufacturing sources performing processes/operations outside of their facilities. These sheets shall not be revised or altered after the successful completion of First Article or Production Lot Testing without approval from the ESA located at the NAVAIRDEPOT, Jacksonville, Florida, via the PCO.
- C. The Inspection Method Sheets, which list the characteristics of each item produced under the contract shall have serial number traceability to the raw material, casting, or forging.
- D. The contractor shall provide all certificates of compliance for any material purchased or any processes performed by a sub-vendor, i.e. heat treat, NDI, plating, painting, etc. All material and/or process sub-vendors shall be OEM approved sources.

## MANDATORY QUALITY ASSURANCE PROVISIONS continued

- E. Markings should be I/A/W MIL-STD-130 latest revision, paragraphs 5.3.3(a), (b), (c) and (g). Method and location shall be I/A/W drawing.
- IV. Mandatory Inspection Requirements

During production, mandatory inspection is required to be accomplished by the contractor as follows:

- A. Level of Inspection (LOI).
  - 1. Critical Characteristics: 100% inspection shall apply
- 2. Major and Minor Characteristics LOI shall be I/A/W sampling plan acceptable to the QAR
  - B. Critical Characteristics General Electric Drawing (99207) 4055T40
    - 1. Material
    - 2. Note 3 FPI requirement
  - C. Major and Minor Characteristics
- 1. Shall be defined by the contractor subject to QAR concurrence, unless defined on applicable drawings and associated specifications.
- V. Unless expressly provided for elsewhere in this Clause, equipment such as fixtures, jigs, dies, patterns, templates, mylars, special tooling, test equipment, or any other manufacturing aid required for the manufacture and/or testing of the subject item(s) will not be provided by the Government or any other source and is the sole responsibility of the contractor. The foregoing applies notwithstanding any reference to such equipment or the furnishing thereof that may be contained in any drawing or referenced specification.
- VI. The following manufacturing aid(s) will be furnished for the purpose(s) indicated and shall be returned to the Government after use as intended and not later than the delivery date of the last production item of the contract EQUIPMENT PURPOSE COGNIZANT ACTIVITY.

# FIRST ARTICLE TEST REQUIREMENTS (GOVERNMENT TESTING)

P/N: (99207) 4055T

NOMEN: STUD SHOULDERED

NSN: 5307-01-144-3972

Criticality: CSI

Criticality determination date: 23 Jun 04

I. First Article Inspection/Test Criteria:

The tests to be performed under the First Article approval clause of the contract are:

- A. Compliance with General Electric Drawing (99207) 4055T40 and all specifications referenced therein.
- B. Identification: Verification and certification that the parts are serialized and identified per the requirements of General Electric Drawing (99207) 4055T40 and all specifications referenced therein.
- C. Packaging and Preservation: Verification that the parts have been packaged and preserved per the requirements of the contract.
- D. Verification and certification of the overall workmanship of the First Article Sample(s).
  - E. Visual: Dimensional: 100% dimensional.
  - F. Non-Destructive Inspection: Per drawing.
- G. Fit/Form: Verification and certification of fit/form to the next higher assembly, Main Landing Gear Shock Strut.
  - H. Material Analysis of the First Article Sample(s):

Flight critical characteristics for P/N 4055T40P01 are:

- A. Material
- B. Note 3 FPI requirement

## FIRST ARTICLE TESTS REQUIREMENTS (GOVERNMENT TESTING) continued

In addition to the above tests, the First Article(s) to be delivered hereunder shall also be subjected to those tests, which will demonstrate that the articles comply with contract requirements. The contractor shall be responsible for providing necessary parts and repair of the First Article(s) during testing.

- II. Samples to be submitted for testing:
  - A. Quantity 2 each.
  - B. Estimated Cost: T.B.D.

### III. Special Instructions:

- A. Upon successful first article inspection all processes are to be frozen. Any changes to the manufacturing process will be cause for a new First Article Inspection.
- B. One sample will be destroyed during testing and will not be returned to the contractor. One sample may be considered as production items under the contract provided the sample could be refurbished to ready for issue (RFI) condition and provided the sample has inspection approval of the cognizant QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.
- C. Waiver of the destruction of the First Article test piece may be granted if the contractor provides a certified test coupon that is of the same material and has undergone the same special processes as the First Article test piece.
- D. One sample is to be unpainted and all corrosive areas are to be coated with a light preservative on both samples.

# Notification of Shipment of Material for Government Testing

A. Fourteen (14) days prior to shipment of the First Article Sample(s) the contractor shall notify the designated test facility, in writing of the anticipated shipping date, with an information copy to the PCO, ACO, and QAR. The contractor shall also arrange for preliminary inspection of test sample(s) by the CAO/QAR. The First Article Sample(s) shall be forwarded to the following First Article point of contact at the designated test facility:

Commanding Officer
NAVAIRDEPOT JAX
ATTN: First Article Testing Office
Door 16
NAS Jacksonville, Florida 32212-0016

# FIRST ARTICLE TESTS REQUIREMENTS (GOVERNMENT TESTING) continued

B. Upon shipment of First Article Sample(s), two (2) copies of the Material Inspection and Receiving Report (DD Form 250), bearing the QAR's signature and indication of preliminary inspection, shall be forwarded to the PCO/ACO DSCR Code DSCR-VC, and the designated test facility. In addition, the contractor must supply all detailed process/operation sheets, Inspection Method Sheets, First Article Test Report (Signed by the QAR), and all Certificates of Compliance for material (including chemical analysis), Magnetic Particle Inspection and any out-sourced process conducted on the First Article Sample(s). These forms and documentation may either be placed in the shipping container with the sample(s) or sent separately, however the envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM." These forms and documentation shall be sent to the following point of contact:

Commanding Officer
NAVAIRDEPOT JAX
ATTN: First Article Testing Office
Door 16
NAS Jacksonville, Florida 32212-0016

Within 120 days after receipt of the sample(s) the test site shall complete testing/evaluation and submit a copy of their test report with conclusions and recommendations to DSCR-VC.

# PRODUCTION LOT TESTING REQUIREMENTS (GOVERNMENT TESTING)

P/N: (06710) 4055T40P01, Rev K

NOMEN: HIGH PRESSURE TURBINE ROTOR SYS

NSN: 5307-01-144-3972

QUANTITY: 1 Criticality: CSI

Criticality determination date: 23 Jun 04

The material produced under contract shall be accepted by the cognizant CAO/QAR upon the successful completion of these requirements.

### I. Production Lot Test Requirements

- A. The cognizant CAO/QAR shall select the applicable number of items at random from the production lot per the ANSI/ASQC Z1-4 Sampling Procedures and Tables for Inspection by Attributes. In addition the QAR shall select the applicable number of items at random from each successive lot or portion thereof per the ANSI/ASQC Z1-4 Sampling Procedures and Tables for Inspection by Attributes.
  - B. Production Lot Testing to be completed during production after First Article Approval.
  - C. Sample(s) are to be unpainted. Corrosive areas to be coated with a light preservative.
- D. If sample(s) are not destroyed during testing, they will be put into Defense Logistic Agency stock.
- II. The tests to be performed under the Production Lot Sample testing provisions of the contract are:
- A. Compliance with General Electric Drawing (99207) 4055T40 and all details and specifications referenced therein.
- B. Identification: Verification and certification that the parts are serialized and identified per the requirements of General Electric Drawing (99207) 4055T40 and all details and specifications referenced therein.
- C. Packaging and Preservation: Verification that the parts have been packaged and preserved per the requirements of the contract.
- D. Visual: Verification and certification of the overall workmanship of the Production Lot Sample(s).
- E. Dimensional: Verification and certification of 100% dimension check of finished Production Lot Sample(s).

## PRODUCTION LOT TESTING REQUIREMENTS (GOVERNMENT TESTING) continued

- F. Non-Destructive Inspection: Verification and certification of Fluorescent Penetrant Inspection per General Electric Drawing (99207) 4055T40.
- G. Fit/Form/Function: Verification and certification of fit/form/function to the next higher assembly.
- H. Material Analysis of the Production Lot Sample(s). NOTE: A destructive material analysis can be waived ONLY if a destructive material analysis was conducted by the Engineering Support Activity (ESA), AIR-4.3.4.1, Naval Air Depot, Jacksonville, FL, during a successful First Article Inspection. However, all applicable material certificates of compliance will have to be provided for the production lot for verification of the material.
  - I. Review of documentation as provided under DD 1423 requirements.

In addition to the above tests, the Product Lot Sample(s) to be delivered hereunder shall also be subjected to those tests which will demonstrate that the sample(s) comply with contract requirements.

### III. Testing Location

A. The contractor is to ship sample(s) and all required documentation and technical data to:

Commanding Officer
NAVAIRDEPOT JAX
ATTN: First Article Testing Office
Door 16
NAS Jacksonville, Florida 32212-0016

B. The shipping container marking:	"FOR PRODUCTION LOT TESTING. NON RFI
MATERIAL. DO NOT TAKE UP IN	STOCK. CONTRACT NUMBER

Within fifteen (15) days of completion of Production Lot Testing the CAO/QAR shall prepare and submit two (2) copies of their test report with conclusions and recommendations to the Contracting Officer.

### PRODUCTION LOT TESTING REQUIREMENTS (GOVERNMENT TESTING) continued

### Shipment and Distribution of Sample(s):

- A. Fourteen (14) days prior to shipment of Production Lot Sample(s) the contractor shall notify the designated test facility, in writing of the anticipated shipping date, with an information copy to the PCO, ACO and the QAR. The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.
- B. Upon shipment of the Production Lot Sample(s), two (2) copies of the Material Inspection and Receiving Report (DD Form 250), bearing the QAR's signature and indication of preliminary inspection, shall be forwarded to the PCO/ACO DSCP (Code DSCP-IT), and the testing facility. In addition, the contractor shall provide all detailed Process/Operation Sheets, Inspection Method Sheets, First Article Test Report (Signed by the QAR), and all Certificates of Compliance for material (including chemical analysis), Magnetic Particle Inspection, Fluorescent Penetrant Inspection, any out-sourced process conducted on the Production Lot Sample(s) and all technical data used to manufacture the Production Lot Sample(s) to the testing facility. The envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM".
- C. Production Lot Sample(s) may be considered as production items under the contract provided the sample(s) can be refurbished to Ready for Issue (RFI) condition and provided sample(s) have inspection approval from the cognizant DCMAO and the ESA engineer (F404 FST (4.3.5). Sample(s) may be shipped as production items ONLY after all other units required under contract have been produced and are ready for shipment.
- D. Sample(s) will be returned to the contractor. The contractor must provide material disposition instructions to:

Commanding Officer
NAVAIRDEPOT JAX
ATTN: First Article Testing Office
Door 16
NAS Jacksonville, Florida 32212-0016

E. The designated test facility and the contracting officer shall be notified as to all shipping data applicable to the sample(s), such as bill of lading number, method of shipment, etc. within fourteen (14) days prior to shipping.

### **CONTRACT DATA REQUIREMENTS LIST**

Form Approved

Page

10 Pages

blic reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data urces, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other pect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information terations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project 704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for Contract/Pr No. listed in Block E. C. CATEGORY: B. EXHIBIT ONTRACT LINE ITEM NO. OTHER TDP F. CONTRACTOR E. CONTRACT/PR NO. YSTEM/ITEM 5307-01-144-3972 17. PRIC 3 SUBTITLE ATA ITEM NO 2 TITLE OF DATA ITEM COMPLETE PROCESS/OPERATION **CERTIFICATION DATA REPORTS** 0001 6 REQUIRING OFFICE 5. CONTRACT REFERENCE UTHORITY (Data Acquisition Document No.) 18 ESTI **DSC PHILADELPHIA** DI-MISC-80678/T1 TOT DISTRIBUTION 14. 12. DATE OF FIRST SUBMISSION 9 DIST STATEMENT 10. FREQUENCY D 250 REQ b. COPIES REQUIRED **BLOCK 16\* AS REQUIRED** LT 13 DATE OF SUBSEQUENT a. ADDRESSEE Final 11. AS OF DATE PP CODE SUBMISSION Reg Repro **BLOCK 16\*\*** EMARKS **NAVAIRJX 6.3.2** 1 1 DSCR/VGC RA. 10.1,10.2,10.2.1,10.2.2,10.2.4,10.5 APPLY//\* UPON BMISSION OF FIRST ARTICLE TESTING//\*\*IF THE PROCESS 1 CAO ERATIONS CHANGES AFTER APPROVAL OF FIRST ARTICLE 15. TOTAL ATA ITEM NO. 17 PRIC 3. SUBTITLE 2. TITLE OF DATA ITEM **COMPLETE INSPECTION METHOD SHTS CERTIFICATION DATA REPORTS** 0002 6 REQUIRING OFFICE 5 CONTRACT REFERENCE UTHORITY (Data Acquisition Document No.) 18 EST **DSC PHILADELPHIA** DI-MISC-80678/T2 TOT DISTRIBUTION 14. 12. DATE OF FIRST SUBMISSION 10. FREQUENCY 9 DIST STATEMENT D 250 REO b. COPIES REQUIRED AS REQUIRED BLOCK 16\* LT a. ADDRESSEE 13. DATE OF SUBSEQUENT 11, AS OF DATE Final PP CODE Draft SUBMISSION Reg Repro **BLOCK 16\*\*** EMARKS **NAVAIRJX 6.3.2** 1 1 DSCR/VGC RA. 10.1,10.2,10.2.1,10.2.2,10.2.4,10.5 APPLY//\* UPON BMISSION OF FIRST ARTICLE TESTING//\*\*SUBSEQUENT 1 CAO BMISSION TO BE MADE UPON COMPLETION OF CONTRACT. 3 15. TOTAL 17. PRIC 3. SUBTITLE 2. TITLE OF DATA ITEM ATA ITEM NO. REQUEST FOR DEVIATION 0003 6. REQUIRING OFFICE 5. CONTRACT REFERENCE UTHORITY (Data Acquisition Document No.) 18 EST TOT **DSC PHILADELPHIA DI-NDTI-80640C** DISTRIBUTION 14. 12. DATE OF FIRST SUBMISSION 9. DIST STATEMENT 10. FREQUENCY D 250 REQ h COPIES REQUIRED **BLOCK 16\* AS REQUIRED** IT a. ADDRESSEE 13. DATE OF SUBSEQUENT 11, AS OF DATE Draft PP CODE SUBMISSION Reg Repro **BLOCK 16\*\*** 1 **NAVAIRJX 6.3.2** EMARKS 1 DSCR/VGC IGINAL AND TWO COPIES 1 CAO 3 15. TOTAL J. DATE APPROVED BY H DATE REPARED BY 29 Jun 04 f Cox, (904)317-2035, CIMCO Office

Previous editions are obsolete

Form 1423-2. JUN 96 (EG)

1/183

#### **INSTRUCTIONS FOR COMPLETING DD FORM 1423**

(See DoD 5010.12-M for detailed instructions.)

#### FOR GOVERNMENT PERSONNEL

Item A. Self-explanatory.

Item B. Self-explanatory.

Item H.

Item 5.

Mark (x) appropriate category: TDP - Technical Data Item C. Package; TM - Technical Manual: Other - other category

data. such as "Provisioning". "Configuration Management", etc.

Enter name of system/item being acquired that data will Item D.

Self-explanatory (to be filled in after contract award). Item E.

Self-explanatory (to be filled in after contract award). Item F.

Item G. Signature of preparer of CDRL.

Date CDRL was prepared.

Signature of CDRL approval authority. Item I.

Date CDRL was approved. Item J.

See DoD FAR Supplement 4.71 for proper numbering. Item 1.

Enter title as it appears on data acquisition document Item 2. cited in Item 4.

Enter subtitle of data item for further definition of data item

Item 3. (optional entry).

Enter Data Item Description (DID) number, military Item 4 specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that

defines data content and format requirements. Enter reference to tasking in contact that generates requirement for the data item (e.g., Statement of Work paragraph number).

Enter technical office responsible for ensuring adequacy Item 6. of the data item. Specify requirement for inspection/acceptance of the data Item 7.

item by the Government. Specify requirement for approval of a draft before Item 8.

preparation of the final data item. For technical data, specify requirement for contractor to Item 9. mark the appropriate distribution statement on the data

(ref. DoDD 5230.24).

Item 10. Specify number of times data items are to be delivered.

Item 11. Specify as-of date of data item, when applicable.

Item 12. Specify when first submittal is required.

Item 13. Specify when subsequent submittals are required, when applicable. Item 14. Enter addresses and number of draft/final copies to be

delivered to each addressee. Explain reproducible copies in Item 16.

Item 15. Enter total number of draft/final copies to be delivered.

Item 16. Use for additional/clarifying information for Items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and

13; Explanation of reproducible copies in Item 14, Desired

#### FOR THE CONTRACTOR

Specify appropriate price group from one of the follow groups of effort in developing estimated prices for each data it listed on the DD Form 1423.

a. Group I. Definition - Data which is not otherw essential to the contractor's performance of the primary contract effort (production, development, testing, and administration) which is required by DD Form 1423.

Estimated Price - Costs to be included under Group I those applicable to preparing and assembling the data item conformance with Government requirements, and the administrat and other expenses related to reproducing and delivering such d items to the Government.

b. Group II. Definition - Data which is essential to performance of the primary contracted effort but the contractor required to perform additional work to conform to Governm requirements with regard to depth of content, format, frequency submittal, preparation, control, or quality of the data item.

Estimated Price - Costs to be included under Group are those incurred over and above the cost of the essential d item without conforming to Government requirements, and

delivering such data item to the Government.

item.

c. Group III. Definition - Data which the contractor m develop for his internal use in performance of the primary contract effort and does not require any substantial change to conform

Government requirements with regard to depth of content, form

frequency of submittal, preparation, control, and quality of the d

administrative and other expenses related to reproducing a

Estimated Price - Costs to be included under Group are the administrative and other expenses related to reproduc and delivering such data item to the Government.

d. Group IV. Definition - Data which is developed by contractor as part of his normal operating procedures and his ef in supplying these data to the Government is minimal.

Estimated Price - Group IV items should normally shown on the DD Form 1423 at no cost.

portion of the total price which is estimated to be attributable to production or development for the Government of that item of development These estimated data prices shall be developed only from the costs which will be incurred, as a direct result of the requirement supply the data, over and above those costs which would otherv be incurred in performance of the contract if no data were require The estimated data prices shall not include any amount for right

data. The Government's right to use the data shall be governed

the pertinent provisions of the contract.

For each data item, enter an amount equal to

medium for delivery of the data item. DD Form 1423-2 Reverse, JUN 96 (EG)